

## EXECUTIVE SUMMARY

The Department of the Interior (Interior), through the Bureau of Reclamation (Reclamation) and in cooperation with the United States Environmental Protection Agency (EPA), and the Ute Mountain Ute and Southern Ute Indian Tribes (Colorado Ute Tribes), has prepared this Draft Supplemental Environmental Impact Statement (DSEIS). This DSEIS is prepared under the provisions of Public Law (P.L.) 93-638, the Indian Self Determination and Education Assistance Act. It evaluates the potential impacts of implementing the Colorado Ute Indian Water Rights Settlement Act of 1988 (P.L. 100-585) (Settlement Act). The Settlement Act, through construction of the Animas-La Plata Project (ALP Project), is intended to provide the Colorado Ute Tribes an assured long-term water supply in order to satisfy the Colorado Ute Tribes' senior water rights claims.

Because these proposals represent a significant modification of the ALP Project evaluated previously, additional environmental analysis is required. On January 4, 1999, Reclamation announced its intent to prepare a DSEIS to the 1996 Final Supplement to the Final Environmental Statement (1996 FSFES) (*Federal Register* Volume 64, No. 1). The DSEIS analyzes various ways in which the Colorado Ute Tribes' water rights may be settled. Following release of this DSEIS, public hearings will be held and a Final Supplemental Environmental Impact Statement (FSEIS) and Record of Decision will be prepared.

The ALP Project was authorized by the Colorado River Basin Project Act of 1968 to be located in La Plata and Montezuma Counties in southwestern Colorado and in San Juan County in northwestern New Mexico. The ALP Project was designed to provide irrigation and municipal and industrial (M&I) water supplies to the Colorado Ute Tribes and other project beneficiaries. A Colorado Ute Indian Water Rights Final Settlement Agreement (Settlement Agreement) was signed on December 10, 1986, which quantified the Colorado Ute Tribes' water rights. The water rights allow the Colorado Ute Tribes to obtain water from several rivers and projects, including water supplied from the ALP Project. In 1988, Congress incorporated the ALP Project into the Settlement Act in order to settle Colorado Ute Tribal water rights claims.

As a result of a 1868 treaty entered into between the United States and the Colorado Ute Tribes, the Tribes acquired a large reservation encompassing much of southwestern Colorado. That reservation provides the Colorado Ute Tribes with significant reserved water rights on rivers and streams throughout the region. The Colorado Ute Tribes' water rights are senior to most non-Colorado Ute Tribal water rights in the region. In the absence of the Settlement Act, development of senior Colorado Ute Tribal water rights claims could adversely impact non-Colorado Ute Tribal water rights and users, including cities, municipalities, federal land management agencies, and recreation uses throughout southwestern Colorado and northwest New Mexico.

The Settlement Act requires delivery of ALP Project water to the Colorado Ute Tribes by January 1, 2000, to avoid future litigation or renegotiation of Tribal water rights claims. If a project is not approved, or implementation is delayed, the Colorado Ute Tribes have the option of commencing litigation or renegotiating their reserved water rights claims by January 1, 2005.

The completion of the Settlement Act has been delayed because of a convergence of factors: an increasingly prominent role of endangered species and watershed recovery strategies, decreasing federal support for irrigated agriculture, a decline in new reservoirs and dams built by Reclamation, and increasing local participation in water resource development matters. Each of these factors has led to a series of refinements to the original ALP Project.

The current purpose of and need for the proposed federal action is:

*... to implement the Settlement Act by providing the Ute Tribes an assured long-term water supply and water acquisition fund in order to satisfy the Tribes' senior water rights claims as quantified in the Settlement Act, and to provide for identified M&I water needs in the Project area." [Federal Register Notice, January 4, 1999]*

Providing the Colorado Ute Tribes with an assured long-term water supply is necessary to protect existing water users from senior water rights claims. The Colorado Ute Tribes will use this assured water supply to satisfy future M&I water demands on their reservations and to provide water for regional M&I needs. In addition to providing an assured water supply as a settlement of the Colorado Ute Tribes' senior water rights, the ALP Project as proposed provides a dependable long-term water supply for neighboring Indian and non-Indian community water needs, including the Navajo Nation at and near Shiprock, New Mexico, the Animas La Plata Water Conservancy District (ALPWCD) and the San Juan Water Commission (SJWC).

This DSEIS is intended to supplement the 1996 FSFES and the 1980 Final Environmental Statement (1980 FES) for the ALP Project. This DSEIS has been prepared to meet the procedural requirements of the National Environmental Policy Act (NEPA), following the regulations established by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations (CFR) Parts 1500 to 1508) (Regulations). These Regulations provide the legal and regulatory guidelines for preparation of environmental impact statements (EIS). This DSEIS incorporates by reference the 1996 FSFES and the 1980 FES to eliminate duplication and repetitive discussions of the same issues, and also incorporates information from the 1996 FSFES and 1980 FES (40 CFR 1508.28 and 1500.4(j)). The objective of this DSEIS is also to provide an environmental evaluation to assist Interior and other involved parties in reaching a final settlement of the water claims of the Colorado Ute Tribes.

Reclamation proposes to develop a modified ALP Project in southwestern Colorado and northwestern New Mexico for the purpose of finally implementing the Settlement Act. Since the ALP Project is intended to provide stored water in lieu of the assertion of senior Tribal water rights claims, a majority of the project's water supply is not targeted for specific near-term uses. Rather, the waters would be used in the Four Corners region over an indefinite period of time. The Colorado Ute Tribal M&I water uses are currently not specified but were projected. Non-binding projected water uses, both on and off the Colorado Ute Tribal reservations, were evaluated in order to provide possible uses and their associated impacts. Projections were made of a range of potential future M&I uses for project water as a basis for developing alternatives which would effectively provide water to meet these allocations. The scenarios for future water use were based on reasonable estimates of regional growth and projected needs by the Colorado Ute Tribes, Navajo Nation, the ALPWCD, and the SJWC. The specific percentage allocation between the Colorado Ute Tribes and other project beneficiaries may not be fixed. Comments received during scoping, and in recent introduced legislation by non-federal parties (i.e., HR 3112), indicate that the Colorado Ute Tribes may agree to a reallocation of 6,010 acre-feet per year (afy) to the State of Colorado and entities in New Mexico. Further, the ALP Project would be operated to comply with the depletions permitted in the Reasonable and Prudent Alternatives (RPAs) contained in the 1996 final Biological Opinion issued by the U.S. Fish and Wildlife Service (Service) in compliance with the Endangered Species Act (ESA). These opinions limited the average water depletions to 57,100 afy.

Under the ALP Project, the Colorado Ute Tribes would receive 79,050 afy (this represents 39,960 afy of depletions from the San Juan River system). The future uses to which water may be put by the Colorado Ute Tribes will be the subject of future NEPA review at the time the uses are determined and structural

components are designed to convey water to those uses. A projection of future water uses by the Colorado Ute Tribes included the following types of water uses:

- Municipal water use
- Industrial park
- Recreation and tourism development
- Energy development
- Livestock and wildlife water use
- Regional municipal water supply
- Instream leasing of water

The Navajo Nation, ALPWCD, and SJWC would annually receive 30,680 acre-feet (af) (representing 15,340 afy of depletion) of water from the ALP Project. With a small amount accounted for by system operational losses, annual water allocations for the Colorado Ute Tribes, Navajo Nation, ALPWCD, and the SJWC would total 111,965 af (57,100 afy depletion).

The Navajo Nation would receive 4,680 afy (2,340 afy depletion) and would use it to serve the M&I requirements of the Shiprock, Cudei, Hogback, Nenahnezad, Upper Fruitland, San Juan, Sanostee, and Beclaibito Chapters in the Shiprock, New Mexico area. A new water pipeline would be constructed to deliver this water to these eight Navajo Nation chapters, replacing the existing Farmington to Shiprock pipeline. The 4,680 afy represents water to meet growth projections and future M&I requirements of these chapters. The NEPA evaluation of the proposed Navajo Nation Municipal Pipeline (NNMP) is included as part of this DSEIS.

The ALPWCD projects growth of M&I water needs in the Durango, Colorado area (Gronning 1994), based on the continued increase in population to 30,000 and 40,000 levels in its service area, as well as residential, commercial, and industrial growth in outlying areas near Durango. Water allocations of 5,200 afy (2,600 afy depletions) from the ALP Project would supplement existing water supplies and would serve this growth. Future development of facilities to serve the City of Durango and other ALPWCD water users would potentially be the subject of future NEPA compliance.

The SJWC has identified water use needs and projected M&I growth in its service area, including the Cities of Aztec, Bloomfield, and Farmington, New Mexico (Cielo 1995). Under the ALP Project allocations, the SJWC would receive 20,800 afy (10,440 afy depletion), which would meet a portion of its projected water needs. Future development of facilities to serve the Cities of Aztec, Bloomfield, and Farmington and other SJWC water users would potentially be the subject of future NEPA compliance.

Any future actions would be subject to future environmental review, and NEPA compliance would be required as part of any approval by a federal agency. Future federal actions would serve as “triggers” for future NEPA compliance activities, and could include future connection to federal facility for water conveyance enlargement or extension of certain existing conveyance systems, and, certain uses of a water acquisition fund. In addition, other federal and state regulatory and environmental requirements would have to be met in implementation of future actions (e.g., compliance with the ESA and Clean Water Act).

This DSEIS evaluates 10 separate alternatives, including 9 action alternatives that include several structural and non-structural components, and a no action alternative. Project structural components were evaluated, including storage reservoirs, a pumping plant, and conveyance facilities. These are defined in detail, their environmental settings and potential environmental impacts are evaluated, and mitigation measures are proposed. The construction and operation of a water pipeline to transmit treated water to the

Navajo Nation to areas at and near Shiprock (the NNMP) is also a structural component of the ALP Project.

This DSEIS inventories the available land and associated water rights in the McElmo Creek and Mancos, La Plata, Animas, Florida, and Pine River drainages in the vicinity of the two reservations. Land values, seniority of water rights, parcel sizes, and other factors were evaluated to develop a realistic picture of the potential acquisition of land and direct flow water rights. Assumptions were made and representative areas were identified in order to develop an analysis of the range of likely non-structural component options that might be made by one or more of the water users in the future. Finally, as part of the non-structural analysis, the potential for securing water supplies from existing Reclamation-owned storage facilities in the region was evaluated.

The 10 alternatives, and their structural and non-structural components, were then evaluated to determine the relative value of each alternative in terms of:

- Potential environmental impacts
- Meeting the ALP Project purpose and need
- Technical and economic

Considering all three sets of factors (i.e., environmental, purpose and need, technical and economic) for each of the 10 alternatives, Alternative 4 and Alternative 6 (modified to provide for water to non-Colorado Ute Tribal entities) were identified as warranting refinement. They each had unique strengths in various areas, and they also represent a significantly different approach in meeting the purpose and need of the project. Alternative 4 is principally a structural alternative and Alternative 6 is principally a non-structural alternative. Working with the basic assumptions that water and land would be purchased from willing sellers, and that project modifications and reoperation will be able to receive the approval of all participating parties to proceed, both Alternative 4 and 6 have merit. Alternatives 4 and 6 were then refined to more closely meet project requirements, and the structural and non-structural components of both were evaluated. The environmental impacts and proposed mitigation for both Refined Alternative 4 and 6 are discussed in some detail in the DSEIS.

**Refined Alternative 4** includes both structural and non-structural elements designed to achieve the fundamental purpose of securing the Colorado Ute Tribes an assured water supply in satisfaction of their water rights as determined by the 1986 Settlement Agreement and the 1988 Settlement Act and by providing for identified M&I water needs in the project area. Refined Alternative 4 includes measures to mitigate fish and wildlife, wetlands, and cultural resource impacts.

The structural component of Refined Alternative 4 would include an off-stream storage reservoir at Ridges Basin (approximately 120,000 af total capacity) with a conservation pool of approximately 30,000 af; a pumping plant with a pumping capacity of up to 280 cubic feet per second (cfs) of capacity; a reservoir inlet conduit (all designed to pump and store water from the Animas River); and a pipeline designed to transport treated municipal water from Farmington, New Mexico to the Shiprock area, New Mexico (the NNMP).

Consumptive use of water from the structural portion of the project would be restricted to M&I uses only and would be allocated in the following manner:

<u>M&amp;I Use</u>	<u>Depletion (afy)</u>
Southern Ute Tribe	19,980
Ute Mountain Ute Tribe	19,980
Navajo Nation	2,340
ALP Water Conservancy District	2,600
San Juan Water Commission	10,400

Under this allocation, the Colorado Ute Tribes would still be approximately 13,000 af short of the total quantity of depletion recognized in the Settlement Agreement. Therefore, the non-structural component of the project would establish a water acquisition fund which the Colorado Ute Tribes could use to acquire water rights on a willing buyer/willing seller basis in an amount sufficient to allow the Tribes approximately 13,000 afy of depletion in addition to the depletions available from the structural portion of the project. Preliminary cost estimates indicate that a one-time fund of approximately \$40 million would be required to purchase the additional rights. However, to provide flexibility in the use of the fund, authorization would allow some or all of the funds to be redirected for on-farm development, water delivery infrastructure, and other economic development activities.

The primary source of the water for the structural portion of Refined Alternative 4 is the Animas River. The project water requirements would be met from the water supply after meeting all current uses, all uses that could occur without further federal action (primarily exercise of state water rights not presently being used as identified by Colorado and New Mexico) and all uses for which favorable biological opinions have been issued.

The water supply for the non-structural alternatives would include the Pine, Florida, Animas, La Plata and Mancos Rivers and McElmo Creek. The supply could be developed from existing uses within each basin, with the associated historic shortages, so no additional water would be needed to meet the demands of the non-structural components.

For Refined Alternative 4, it is estimated that the purchase of 10,300 acres of irrigated land, distributed in four river basins, could be necessary to obtain the 13,000 afy of depletion described under the water acquisition fund. The acreage would be distributed among the four basins as follows:

- Pine River Basin - Purchase 2,300 acres of land and leave the water on the land.
- La Plata River Basin - Purchase 2,300 acres of land and leave the water on the land.
- Animas/Florida River Basins - Purchase 2,300 acres of land and leave the water on the land.
- Mancos River Basin - Purchase 3,300 acres of land and leave water on the land.

**Refined Alternative 6** proposes that water rights under the Settlement Act obtained through (1) augmentation and the coordinated operation of existing federal projects in the area proximal to the Tribe's reservations, and (2) purchase of water rights on irrigated agricultural lands, or (3) a combination of both. Other elements of Refined Alternative 6 include: the NNMP and measures to avoid impacting wetlands from purchase of water and transferring to M&I use. Refined Alternative 6 has been modified to the equivalency of the depletion amounts in Refined Alternative 4 in order to analyze both alternatives on a commensurate or equivalent basis. Like Refined Alternative 4, Refined Alternative 6 also consists of two components:

- One component would be equivalent to the structural component of Refined Alternative 4 by developing up to 57,100 afy of depletions in the San Juan River Basin and serve essentially the same M&I needs as served by Refined Alternative 4.
- A second component for Refined Alternative 6 was developed under the assumption that water could be acquired to develop an equal amount of depletions of 13,000 afy and in a manner similar to Refined Alternative 4 by purchasing agricultural lands and associated water rights.

For the first component of Refined Alternative 6, approximately 11,933 acres would be purchased to yield 17,432 afy of depletions. Other sources of water for Refined Alternative 6 include: the purchase of storage from Red Mesa Reservoir, the coordinated operation of existing reservoirs with streamflows in the San Juan Basin for more efficient utilization of water supplies, and the raising of Lemon Dam.

Land (11,933 acres) and associated water rights would be purchased in the Pine, La Plata, and Mancos River Basins, and McElmo Creek Basin to supply a yield of 17,432 afy of historical depletions. This does not include the land required to supply the 13,000 afy depletions for the water acquisition fund.

- Pine River Basin - A total of 10,000 acres of non-Colorado Ute irrigated land would be purchased in the Pine River Basin. The associated 15,114 af of average annual depletion would be removed from the land and allowed to flow into Navajo Reservoir under the same delivery pattern that would have occurred to the irrigated land. This would become project water with the delivery point at Navajo Reservoir for purposes of administering the purchased water rights in the Pine River.
- La Plata River Basin - To meet the demands not met by available streamflow, a total of 785 acres of irrigated land would be purchased and the associated average annual depletion of 521 af transferred to M&I use.
- Mancos River Basin - To meet the demands not met by available streamflow, a total of 500 acres of irrigated land would be purchased and the associated average annual depletion of 761 af transferred to M&I use.
- McElmo Creek Basin (Montezuma County) - A total of 648 acres, sufficient to provide a firm yield depletion of 1,036 af, would be purchased and the water transferred to M&I use to satisfy regional demand in Montezuma County. All water resulting from these purchases from McElmo Creek would be for the benefit of the Ute Mountain Ute Tribe.

Several federal storage facilities were evaluated for coordinated operation with streamflows in the San Juan Basin for more efficient utilization of water supplies. Navajo Reservoir would be operated to supplement available Animas River flow in meeting the SJWC and Navajo Nation demand, the Farmington, Aztec and Kirtland regional water demands, and the demands for the non-binding uses at the coal mine, coal-fired power plant and gas-fired power plant for the Colorado Ute tribes. To the extent that capacity is not sufficient, additional irrigated acreage could be purchased and retired above the reservoir to augment the water supply. Vallecito Reservoir would operate as it has historically been operated, storing water to deliver any water transferred from irrigation to M&I use in the same pattern as for irrigation. Jackson Gulch Reservoir would be operated to store agricultural water purchased for conversion to M&I and release according to demand as long as such operation did not impact the delivery of agricultural water to existing right holders.

Approximately 200 af of storage space would be purchased in Red Mesa Reservoir.

In summary, approximately 36,891 af of water may become available through coordinated operation of existing reservoirs with streamflows in the San Juan Basin. Subsequent computer modeling studies would need to verify the amount.

The capacity of Lemon Reservoir would be increased from approximately 40,000 af to 50,000 af by raising the dam 11.5 feet. Increased capacity would be used to deliver water to the Florida Mesa Housing Unit and supplement Animas River diversions to meet the City of Durango demands and the Durango regional demands. The average annual depletion supplied by Lemon Reservoir to these uses is about 500 af, ranging from zero to 1,500 af per month. More detailed water operation modeling studies would need to be completed to verify the yield from enlarging Lemon Reservoir.

A water acquisition component of Refined Alternative 6 that would be commensurate with the non-structural component of Refined Alternative 4 for the purchase of agricultural lands to obtain 13,000 afy depletions was developed. Under this component the water would be left on the land. A summary of the lands purchased under this component are as follows:

- Animas and Florida River Basins - Acreage sufficient to provide a firm yield depletion of 6,500 af would be purchased in the Animas and Florida River Basins as an equivalent to the non-structural component of Refined Alternative 4. The water would remain on the land as described in Refined Alternative 4. With a depletion factor of 1.4 af per acre, 4,643 acres would be required.
- McElmo Creek Basin (Montezuma County) - Approximately 4,062 acres, an amount sufficient to provide a firm yield depletion of 6,500 af would be purchased in the Montezuma Valley, either within the Montezuma Valley District or elsewhere in the Dolores Project service area as an equivalent to the non-structural component of the Refined Alternative 4. The water would remain on the land.

Refined Alternative 4 and Refined Alternative 6 were thoroughly evaluated with the analysis being presented in Chapters 2, 3 and 4. In Chapter 5, additional analysis was completed to test the ability of the refined alternatives to meet the purpose and need of the project, which is to implement the Colorado Ute Indian Water Rights Settlement Act.

On the basis of this overall evaluation, it was determined that Refined Alternative 4 would best meet the ALP Project purpose and need. Accordingly, Refined Alternative 4 was designated as Reclamation's Preferred Alternative. A final determination will be made by Reclamation and Interior using information contained within a FSEIS that will be prepared based, in part, on the analysis contained within this DSEIS and comments received by reviewing agencies and the public.